

REMARKS

Claims 1 – 27, and 29 – 33, remain in the application and are presented for examination and reconsideration. Claim 27 has been amended. Claim 28 has been cancelled.

ALLOWED AND ALLOWABLE CLAIMS

Applicants are pleased to note that Claims 14, 15, and 21-26 have been allowed.

Furthermore, Applicants are pleased to note that Claim 10 has been found allowable, and is only objected to as being dependent on a rejected base Claim 1. Applicants wish to hold in abeyance any amendment of Claim 10 until resolution of the allowability of Claim 1 has been made. As stated herein, Applicants contend that Claim 1 is neither anticipated nor obvious, and is patentably distinguishable from the prior art.

REJECTION UNDER 35 U.S.C. 112

The Examiner's rejection of Claim 28, under 35 U.S.C. 112, second paragraph, as being indefinite, has been rendered moot as a result of Applicant's cancellation of Claim 28.

REJECTION UNDER 35 U.S.C. 102 (b)

The Examiner has rejected Claims 1-6, 8, 9, 11, 13, 16, 17, and 29-32, under 35 U.S.C. 102 (b) as anticipated by, or, in the alternative, under 35 U.S.C. 103 (a), as obvious over U.S. Patent No. 5,760,135 to Korpman et al. (herein Korpman et al.). Applicants respectfully traverse this rejection.

In more detail, the Examiner has stated that the Korpman et al. patent teaches an adhesive composition, and a tape thereof, comprising an isoprene-styrene BLOCK (emphasis added) copolymer, a styrene-ethylene-butylene-styrene block copolymer, a phenol-formaldehyde curing agent, a phenolic antioxidant, and a hydrocarbon tackifier. In support of this statement, Applicants' attention has been called to column 3, lines 31-36, column 4, lines 47-51 and 65-66, column 5, lines 40-41 and line 56 to column 6, line 56, of the Korpman et al. patent. Further, the Examiner has stated that the Korpman et al. patent, at column 4, lines 52-61 discloses the use of curing accelerators containing zinc, and at column 5, line 3, discloses the use of fillers such as zinc oxide.

Applicants agree with the Examiner's representation of the disclosure of the Korpman et al. patent, except for one point, that is an essential difference. This is the Examiner's statement that the adhesive of Korpman et al includes an isoprene-styrene BLOCK copolymer. This is incorrect. The Korpman et al. patent describes adhesive compositions that include liquid isoprene - styrene copolymers, not solid isoprene - styrene BLOCK copolymers. It is well known that block copolymers are solid. This is an accurate representation of the Korpman et al. patent that describes and claims novel adhesive compositions formed of a liquid rubber and a solid rubber. A statement that the Korpman et al. patent discloses an adhesive composition that includes only solid rubbers, and no liquid rubber is incorrect.

The invention of Korpman et al. is set forth in the Abstract, Field of the Invention, Summary of the Invention, Detailed Description of the Invention, and Claims. It is clearly stated that the adhesive composition of the Korpman et al. patent is formed by combining a liquid rubber and a solid rubber. There can be no question concerning the invention of the Korpman et al. patent. It is stated, at column 2, line 67- column 3, line 2, that the invention of Korpman et al. relates to a finding that the addition of liquid rubber imparts to the solid rubber an improved degree of adhesiveness and tackiness.

The solid rubbers of the Korpman et al. patent are described at column 2, lines 27-31, and at column 3, line 13- column 4, line 8. The listing of solid rubbers includes elastomers, as well as many block copolymers. The liquid rubbers of the Korpman et al. patent are described at column 2, lines 32-42, and at column 4, lines 9-29. It should be noted that the listing of suitable liquid rubbers does not include any block copolymers. This is not surprising since block copolymers are solid, not liquid. With this in mind, a correct description of the adhesive composition of the Korpman et al. patent would include a liquid isoprene-styrene rubber, not an isoprene-styrene block copolymer.

It is apparent that there is a significant difference between the teaching of the Korpman et al. patent, and the invention of Applicants' claims.

It is well established that for a reference to anticipate a claimed invention, all the limitations of the claimed invention must be literally or inherently found in a single reference. Accordingly, Applicants submit that the Korpman et al. patent does not anticipate Claims 1-6, 8, 9, 11, 13, 16, 17, and 29-32, and respectfully request the Examiner to withdraw the rejection of Claims 1-6, 8, 9, 11, 13, 16, 17, and 29-32, under 35 U.S.C. 102 (b).

REJECTION UNDER 35 U.S.C. 103 (a) OVER

KORPMAN et al. in view of EP 1,043,373

The Examiner has rejected Claims 1-9, 11, 13, 16-20, and 29-32, under 35 U.S.C. 103 (a) as being obvious over Korpman et al. (U.S. 5,760,135) in view of EP 1,043,373. Applicants respectfully traverse this rejection.

In more detail, the Examiner has stated that the Applicants' claims recite a polyethylene backing, that is not disclosed in Korpman et al, which does, however, disclose the use of an adhesive on skin and on a film substrate, at column 6, lines 46-57. Further, the Examiner has stated that EP 1,043,373 (herein EP '373) teaches the use of polyethylene as a backing for tapes, in paragraph 30. From this, the Examiner concludes that it would have been obvious to use the backing of EP '373 in the Korpman et al. patent.

Applicants agree with the Examiner that EP '373 discloses the use of polyolefins as backings for adhesive tapes. However, combining the teachings of EP '373 with the teachings of the Korpman et al. patent will not render obvious Claims 1-9, 11, 13, 16-20, and 29-32, as indicated by the Examiner. The combination of EP '373 with the Korpman et al. patent will yield an adhesive tape comprising a polyolefin backing having thereon an adhesive that is significantly different from the adhesive of Applicants' invention. Furthermore, the difference between the adhesive of Korpman et al. and the adhesive of Applicants' invention involves components of the adhesive composition.

The adhesive of Korpman et al. is a mixture of a liquid rubber and a solid rubber. The presence of the liquid rubber is critical in the Korpman et al. patent since it is stated therein that the liquid rubber imparts to the solid rubber improved adhesiveness and tackiness. In fact, Korpman et al. have described the invention as involving superior results for skin applications and for general applications including cold weather and oily surface applications (see column 2, lines 52-54); superior finger tack and superior skin adhesion (see column 7, lines 3-10); superior skin wetting properties (see column 8, lines 8-9); and is colorless, odorless, and free from impurities (see column 8, lines 18-30). In view of all the advantages described, Applicants contend there would be no motivation for Korpman et al to alter or modify the adhesive shown therein, in any manner, let alone in the manner of the adhesive of the Applicants' claimed adhesive.

The claimed adhesive of Applicants comprises a styrene-ethylene-butylene-styrene block copolymer, that is a solid rubber, and a natural or synthetic elastomer, that is solid rubber, and a natural or synthetic elastomer, that is also a solid rubber. It is well known that block copolymers are solid rubbers, and this is shown also in the Korpman et al. patent, at column 3, line 13- column 4, line 8. In addition, elastomers are described, in the Korpman et al. patent, at column 2, lines 27-30, and at column 3, lines 13-15, as solid rubbers. This is confirmed by the OXFORD CONCISE SCIENCE DICTIONARY,

third edition, wherein elastomer is defined as a natural or synthetic rubber that is able to undergo deformation under the influence of a force and regain its original shape once the force has been removed. Thus, it is clear that elastomers are solids and have elastic properties. To the contrary, a liquid rubber can be deformed, but does not recover from the deformation.

Consequently, there is no basis that is apparent for one of ordinary skill in the art obtaining the presently claimed invention by combining the Korpman et al. patent and EP '373. At most, if one of ordinary skill were motivated to combine Korpman et al. with EP '373, then one would have a tape comprised of a polyolefin backing and an adhesive thereon that differs from the adhesive of the Applicants' invention. Thus, neither the adhesive composition nor tape utilizing the adhesive composition, of Applicants' invention, would be obtained by the combination of references.

Applicants, therefore, do not agree that Claims 1-9, 11, 13, 16-20, and 29-32, are unpatentable as being obvious over Korpman et al in view of European Patent No. 1,043,373. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of Claims 1-9, 11, 13, 16-20, and 29-32, under 35 U.S.C. 103 (a).

REJECTION UNDER 35 U.S.C. 103 (a) OVER
KORPMAN et al. IN VIEW OF CHEN

The Examiner has rejected Claims 1-9, 11, 13, 16, 17, and 27-32, under 35 U.S.C. 103 (a) as being obvious over Korpman et al. (U.S. Patent No. 5,760,135) in view of Chen (U.S. Patent No. 5,405,703). Applicants respectfully traverse this rejection.

In more detail, the Examiner has indicated that Korpman et al. does not disclose the use of an adhesive tape for air ducts. However, the Examiner further states that the Chen patent discloses use of an adhesive tape for air ducts. From this, the Examiner concludes that it would have been obvious to one skilled in the art to combine the teaching of Chen with the teaching of

Korpman et al., and thereby obtain the invention of the rejected Claims 1-9, 11, 13, 16, 17, and 27-32.

Applicants agree that the Chen patent discloses using adhesive tapes for air ducts. However, if one of ordinary skill were to combine the Korpman et al. patent disclosure with the disclosure of the Chen patent, one would still not have the invention described in Applicants' Claims 1-9, 11, 13, 16, 17, and 27-32.

A combination of the teachings of the Korpman et al. and Chen patents, would result in the use for air ducts of an adhesive tape that differs significantly from the adhesive tape of Applicants' invention.

As described completely herein, the adhesive composition, and use thereof in producing adhesive tapes, of Korpman et al., must be a combination of a liquid rubber and a solid rubber. The presence of a liquid rubber in the adhesive composition of Korpman et al. is essential, since it is stated, at column 2, line 67- column 3, line 4, that the finding of the invention was that the addition of a liquid rubber imparts to the solid rubber an improved degree of adhesiveness. In view of this, Applicants contend there is no motivation that would cause any modification of the Korpman et al. adhesive such that an adhesive composition not containing a mixture of a liquid rubber and a solid rubber would be obtained.

Applicants, therefore, do not agree that Claims 1-9, 11, 13, 16, 17, and 27-32, are unpatentable as being obvious over Korpman et al. in view of Chen. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of Claims 1-9, 11, 13, 16, 17, and 27-32, under 35 U.S.C. 103 (a).

REJECTION UNDER 35 U.S.C. 103 (a) OVER
KORPMAN et al. IN VIEW OF CHIANG et al.
OR YU et al.

The Examiner has rejected Claims 1-9, 11-13, 16, 17, and 29-33, under 35 U.S.C. 103 (a) as being obvious over Korpman et al. (U.S. Patent No. 5,760,135) in view of Chiang et al. (U.S. Patent No. 3,956,223) or Yu et al. (U.S. Patent No. 5,453,465). Applicants respectfully traverse this rejection.

In more detail, the Examiner has stated that the Korpman et al. patent does not disclose a brominated phenol-formaldehyde curing agent in the adhesive composition. The Examiner states, however, that a brominated phenol-formaldehyde curing agent is disclosed in the Chiang et al. patent, at column 4, lines 1-9, and in the Yu et al. patent, at column 4, lines 1-9, and in the Yu et al. patent, at column 9, line 66 to column 10, line 1. From this, the Examiner concludes that it would have been obvious to one skilled in the art to combine the Korpman et al. patent with the teachings of either the Chiang et al. or Yu et al. patent, and thereby render obvious Claims 1-9, 11-13, 16, 17, and 29-33.

Applicants agree that a brominated phenol-formaldehyde curing agent is disclosed in both the Chiang et al. and the Yu et al. patents. However, if one of ordinary skill in the art were to combine the Korpman et al. patent disclosure with the disclosure of either the Chiang et al. patent or the Yu et al. patent, one would still not have the invention described in Applicants' Claims 1-9, 11-13, 16, 17, and 29-33.

A combination of the teachings of the Korpman et al. patent and either the Chiang et al. patent or the Yu et al. patent would result in an adhesive composition including a brominated phenol-formaldehyde curing agent. However, the adhesive composition is still significantly different from the adhesive composition of Applicants presently claimed adhesive compositions.

The Korpman et al. patent describes an invention that is an adhesive comprising a mixture of a liquid rubber and a solid rubber. The entire Korpman et al. patent is directed to adhesive compositions that are formed by combining a liquid rubber and a solid rubber. For the reasons set forth herein, Applicants contend there is no motivation that would cause one of ordinary skill to modify the adhesive composition of Korpman et al. in any way that

would not result in an adhesive composition comprising a combination of a liquid rubber and a solid rubber.

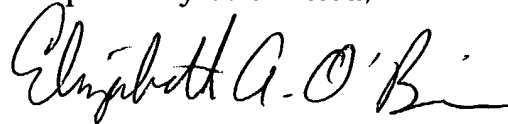
Applicants, therefore, do not agree that Claims 1-9, 11-13, 16, 17, and 29-33, are unpatentable as being obvious over Korpman et al. in view of either Chiang et al. or Yu et al. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of Claims 1-9, 11-13, 16, 17, and 29-33, under 35 U.S.C. 103 (a).

CONCLUSION

Applicants have placed the claims in a form suitable for allowance, and believe the application is in condition for allowance.

Accordingly, in view of the foregoing amendments and remarks, the Examiner is respectfully requested to withdraw the rejections of the claims of the present application. Applicants submit that all of the claims pending in the present application are patentable, and respectfully request the Examiner to pass the application to issue.

Respectfully submitted,



Elizabeth A. O'Brien

Registration No. 46,128

508-261-8513

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Tyco Healthcare Group LP
15 Hampshire Street
Mansfield, MA 02048